CAREER DEVELOPMENT

IN

APPLICATIONS

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A. PURPOSE

The purpose of this plan is to describe the process used to ensure that the Office of Data Processing, Applications has the proper mix of skilled employees to carry out its mission and functions and to ensure that every employee is afforded an equal and reasonable opportunity to advance in his/her career and to be recognized for contributions to the Agency. This plan will describe the nature of our business and the way career development is approached. Subsequent sections in this paper include: policy, environment, method of accomplishing our charter, personnel hiring and development, career training, typical career paths, and the role of panels.

B. POLICY

This plan and its implementation conform to ODP's basic personnel policy. Simply stated, this policy is that each employee will be given equal and reasonable opportunity for employment and career advancement, consistent with the individual's abilities and performance, and the needs of the Agency, without regard to the individual's race, color, religion, sex, age, national origin, or handicap. Promotions and assignments will be made on a competitive basis. ODP will continue its tradition of providing career development opportunities and supporting employees who demonstrate potential and drive for assignments with greater responsibility.

C. ENVIRONMENT

1. Authorized Strength

Applications is authorized a staff strength [   ] STAT personnel. Augmentation of this staff is provided by students on cooperative work-study programs, by part-time staff, and by personnel supplied by various contractors. Additionally, other Agency components provide another forty (40) systems analyst/programmer positions that are filled by Applications personnel on a rotational basis. Thus, the total number of computer professionals associated with Applications frequently is greater STAT than [   ]

The numbers of staff personnel and the grades assigned are controlled by the budget, which establishes the authorization for positions and the money to pay for them, and by the Office of Personnel Policy, Planning, and Management which approves and monitors the staffing complement. The [   ] positions in STAT Applications are divided as follows: 11 clerical positions, 2 technical positions, 11 management positions, and 76 professional positions in Applications. The professional positions are computer

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programmer, mathematician, systems analyst/programmer, and
instructor - ADP.

2. Mission and Requirements

Applications is tasked with the responsibility to develop
and maintain software in support of customer requirements. To do
this, Applications collectively requires competence in FORTRAN,
Programming Language One (PL1), and the two data base languages,
RAMIS and GIM-II, as well as operating systems utilities. General
knowledge of and experience in data structures; job control
languages; data communications; minicomputer programming,
installation, and configuration; distributed processing; the new
terminal capabilities; interactive systems and techniques; and
systems analysis, both in the quantitative modeling areas and in
general business practices are also essential.

3. Meeting Requirements

Whether the customer requirements are for programmer
support, analyst support, or a rotational position, or whether there
is a requirement to fill a position internal to ODP, the matching of
requirements with an individual's ability and desire is the most
important consideration. The proper mix of skills and experience
levels is critical to our success. We must provide opportunities
for growth where an individual can be guided through an experience
of greater responsibility. We must have mentors and teachers at the
senior and intermediate levels to provide on-the-job training and
models for our juniors and trainees. We need an abundance of
skilled personnel to staff our present requirements and prepare for
future ones. In this way Applications will develop the necessary
skills for an individual to progress through increasingly demanding
and rewarding assignments, and will provide the framework for
melding these assignments with the individual's career goals. The
mix of skills shown below represents approximate levels which will
vary over time with attrition, promotions, and the requirements
placed on Applications. Co-op programmer trainees are included here
because career planning for these employees really starts before
they are employed as staff in anticipation of their eventual
recruitment for staff positions.

SKILL LEVEL MIX

STAT

Co-op Trainees   (up to 10 at any one time)
Trainees
Programmers
Mathematicians
Analyst/Programmers
Training Officers
Management
Clerical
Technical

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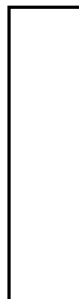
D. <u>PERSONNEL HIRING AND DEVELOPMENT</u>

We expect to hire about six to nine entry-level programmers and about two to four experienced programmers from external sources per year. Internally, we can expect to hire about two per year.

The starting salaries for the entry level trainees generally vary from GS-7, Step 1 through GS-7, Step 8, depending on experience, skills, previous Agency experience, and type of academic degree. Student trainees who have had successful work experiences will be vigorously recruited. Salaries for significant experience outside ODP varies, but can be expected to be as high as GS-13 level.

1. Entry to Applications

a. Internal Hiring:

Our primary source of entry-level programmers from within ODP is Production Division. A person entering Applications from Production Division has an in-depth knowledge of the operational environment awaiting an application system and should most likely be an expert in the use of Job Control Language (JCL) to optimize the efficiency of the operational flow of a production application.

b. External Transfers:

Other Agency components do not supply candidates on a regular basis. Individuals with interest and experience in ADP are considered, upon application or referral, as are all other applicants. Upward mobility candidates are reviewed regularly.

c. External Recruitment:

Applications will continue to view its co-op program as its primary source of entry level programmers. We will also consider college graduates with B.S. degrees in Computer Science or related disciplines such as Electrical Engineering, Mathematics, or Economics.

d. Selection:

The selection process involves application, screening, interviews and decision.

1) Employment applications are made up of some combination of the following:

Memo from applicant
Memo from Agency employee recommending applicant
Official file

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Recruiter report
Letter from applicant
Resume
Form 171
Personal History Statement
Transcript
Letter(s) of recommendation

2) Screening

Before an applicant is invited for interviews, the applicant's file is reviewed by the DD/A or the A/DD/A to distinguish those applicants warranting further consideration from the unacceptable, non-qualified applicants.

3) Interview Process

The interview process is two-fold: to contribute to Applications' impression of the individual and to give the individual some general idea about how we operate and how he or she would be expected to operate in our environment. For these reasons, applicants are interviewed by representativees from the Applications divisions, as well as by the DD/A or A/DD/A. Interviewers prepare individual reports on their evaluation of the applicant and submit them as input to the hiring decision.

4) Hiring Decision

As with many assignment decisions for staff employees, the DD/A or A/DD/A makes the decision to hire based on his composite evaluation of the applicant. In the composite evaluations, considerations include:

Academic record
Experience
Interview reports
DD/A or A/DD/A Interview
Testing results

2. Indoctrination/Technical Training

New employees are assigned to Applications based on component needs and individual's skill and preference. New employees are given both the ODP orientation and Agency orientation courses within the first year.

Entry level personnel are given the opportunity to hone their technical skills by taking technical training offered by the Training Staff. Training also comes from working an assignment that uses what they've just learned. While this is not always possible, the supervisor should strive for a good training/assignment match.

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Training offered by the Training Staff includes basic and advanced courses in the VM system, Job Control Language, Programming Language 1, various levels of both data base management languages (GIM-II and RAMIS) and other courses which explain other specialized functions of our technical environment. At the end of two years of formal training, on-the job training, and working experience, entry-level programmers will be expected to know and be able to use one of the major higher level languages (PL/1 or FORTRAN), one of the DBMS systems, and to be able to perform technical programming tasks in our environment with minimal supervision.

    3.   Counseling and Assessment

Counseling may be initiated at the request of either the employee or the supervisor. Informal counsel, advice, guidance, and exchange of views should occur on a day-to-day basis. Formal counsel is a necessary part of advanced work planning, performance review and career planning, and should be at least two to three times per year. The employee has every right to expect the supervisor to provide constructive comment on his career development, to appraise frankly his promotion possibilities, and to provide positive and negative feedback. In special cases, where performance is not satisfactory, special sessions may be arranged to determine problems and agree on an approach to solving them.

If for any reason the employee feels a need for independent counsel, he may request an interview with the ODP Career Development Officer, or may request an interview with vocational experts outside of ODP. If the latter case, Psychological Services Staff/OMS provides this service. The testing facilities of PSS such as the Professional Aptitude Test Battery (PATB), or Differential Aptitude Test (DAT) are available to assist in career guidance.

The Performance Appraisal Report (PAR), an Agency requirement, is an evaluation of performance that must be prepared for each employee. The supervisor prepares this report annually, which is evaluated with the Advanced Work Plan and reviewed by the next higher supervisor. The regulations and the instructions for preparation of Performance Appraisal Reports, which explain fully how the system works, should be read by all employees.

Competitive Rankings are performed twice a year for each individual. An ODP Instruction (ODP-20-3-75) (Attachment I) to all employees explains the criteria used and the procedures followed. The rankings are used as indicators of readiness for promotion for managerial training and for rotational assignments.

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E. ROLE OF EVALUATION PANELS

Evaluation panels exist for the major components of ODP. Panels are responsible for developing annual competitive rankings and recommending personnel actions for careerists through GS-11 within their respective components. Each Division and Staff Chief sits on the evaluation panel, and represents personnel of the division or staff, plus those personnel on rotational assignments and assigned to the Division Chief. The MZ Career Board performs this function for GS-12 through GS-15 careerists. The Applications Panel is chaired by the Associate Deputy Director for Applications and has the following voting members:

> Chief, A Division
> Chief, B Divison
> Chief, C Division
> Chief, D Division
> Chief, Training Staff

The Executive Officer and Personnel Officer of ODP serve as non-voting advisors to promote uniformity among the Panels. The Deputy Director for Applications, as an MZ Board Member, serves as an ex officio member of the Applications Panel, attending meetings when requested by the Chairman.

F. CAREER TRAINING

Beginning in 1981, each supervisor will prepare an individual training plan for each employee for the upcoming fiscal year. The plan will include planned internal and external training (including both commercial and academic, as well as conferences), and when summarized will become the Applications training plan. CRITICAL TO THE SUCCESS OF THIS PLAN IS THE INDIVIDUAL'S PARTICIPATION IN ITS PREPARATION.

1. ODP Internal training is used as a primary source of technical training for all Applications employees. A catalog of training offered by our Training Staff is published every six months. The Training Staff is alert to new course requirements and specialized or unusual needs, and can be counted on to be responsive to both.

2. Office of Training & Education courses are used to prepare professionals to become managers, to broaden the perspectives of employees by increasing their knowledge of Agency operations, and to sharpen skills (e.g., Effective Briefing).

3. External academic training is used for specialized training in job related subjects such as advanced mathematics. It is also used for employee development and academic advancement. The ODP Fellowship program, as outlined in ODP Instruction 18-2-80, offers the opportunity for a semester or two of full-time education.

4. Our ability to provide training at external facilities has become increasingly limited. However, to the extent that funding permits, we expect to use external training sources to complement our internal training. The priorities to be used in Applications for determining the use of external training funds are as follows:

a. To learn technical skills and/or acquire knowledge of new tools. Examples are: word processing, color graphics, project management, new communications technology, or special purpose equipment planned for customer use.

b. Attending academic training at accredited universities on employees' off-duty hours.

c. General developmental type training and professional conferences.

5. Career training for supervisors is equally important. Supervisors are expected to have completed or be enrolled in the Management Seminar, Management for Equality of Opportunity, Leadership Styles and Behavior, Creative Management, Career Counseling, and other such pertinent courses offered by OTE.

G. CAREER ASSIGNMENTS

Career development needs are normally considered in making personnel assignments, particularly at the senior project leader/beginning management level. But the need for services may dictate an assignment. From entry level programmer through to GS-14 analyst/programmer, employees' assignments, experience gathered, and recognition won, vary widely from person to person and task to task. Two important factors are: being ready when an opportunity arises, and being available when an opportunity occurs. We recognize that neither of these factors is completely under the control of either the employee or management.

Supervisors at all levels are the keys to making any career development plan work. Two of the most important tasks for supervisors are fulfilling the mission of the organization and developing the personnel assigned to them. Career planning touches on both of these. Employees are encouraged to develop a candid one-to-one relationship with their supervisor to better enable the supervisor to represent one's career interests. The first level of supervision, which often occurs at the team level, is important for establishing a mentor/tutor relationship, for providing a model which the new employee can emulate, and for imparting the intangible bits of culture in which the organization operates. The levels at which supervisors prepare performance appraisals, assess potential, and counsel employees are the levels of Project Leader, the Deputy Division Chief, Division Chief, or above.

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Supervisors should try to make each technical assignment progressively more challenging, more testing in terms of the person's growth. Assignments are made in response to incoming tasks or tasks in the queue. In the highly dynamic environment in which we exist, it is a challenge to each supervisor to provide the assignment variety each person needs.

Assignments to rotational jobs at the GS-13 level and below are made as follows: the jobs are advertised; interest by employees is indicated; and the evaluation panel agrees on the candidates. Assignments to rotation are viewed as a way to acquire visibility, to broaden perspective, to acquire new knowledge, and to demonstrate the range of a person's skills and experience.

H. CAREER PATHS

As depicted in Charts I and II, there is no single road map to career development in Applications, but one generally prepares for new opportunities as follows:

Programmer Trainee GS-6 - 10	Learns and uses one HOL, one DBMS, works on programming duties, including maintenance.
Programmer GS-8 - 12	Knows and uses one HOL, one DBMS, serves on single person projects and begins analysis tasks.
Systems Analyst/Programmer GS-12 Mathematician GS-12	Knows and uses system analysis techniques, gains experience with one person projects from start to finish, performs progressively more complex programming and analysis tasks, with greater scope and diversity in the assignments. May lead a maintenance programming project. Comes increasingly into contact with customers. At the end of this period, may consider rotational assignment. Has performed as team member or sub-project leader on large project.
Systems Analyst/Programmer GS-13 Mathematician GS-13	Performs as project leader, acts as tutor for junior programmers, supervises other teams members in project teams, knows and uses large project management techniques, is fully familiar with nearly the full scope of computer science tools and techniques. May serve as a component

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APPLICATIONS

GRADES	
18	**ADP MANAGEMENT**
17	
16	
15	**DIVISION MGT**
14	**SENIOR ANALYST**
13	TRAINING / SR PGMR / PGMR/ANALYST / MGT STAFF ANALYST
12	CON-SULTING
11	TECH
10	SUPPORT / PROGRAMMER
9	
8	JUNIOR PROGRAMMER
7	
6	
5	
4	
3	

CHART 7

ODP
JOB FAMILIES or
CAREER PATH CLUSTERS

ADP MANAGEMENT	
COMPUTER PROCESSING	APPLICATIONS DEVELOPMENT

CHART II

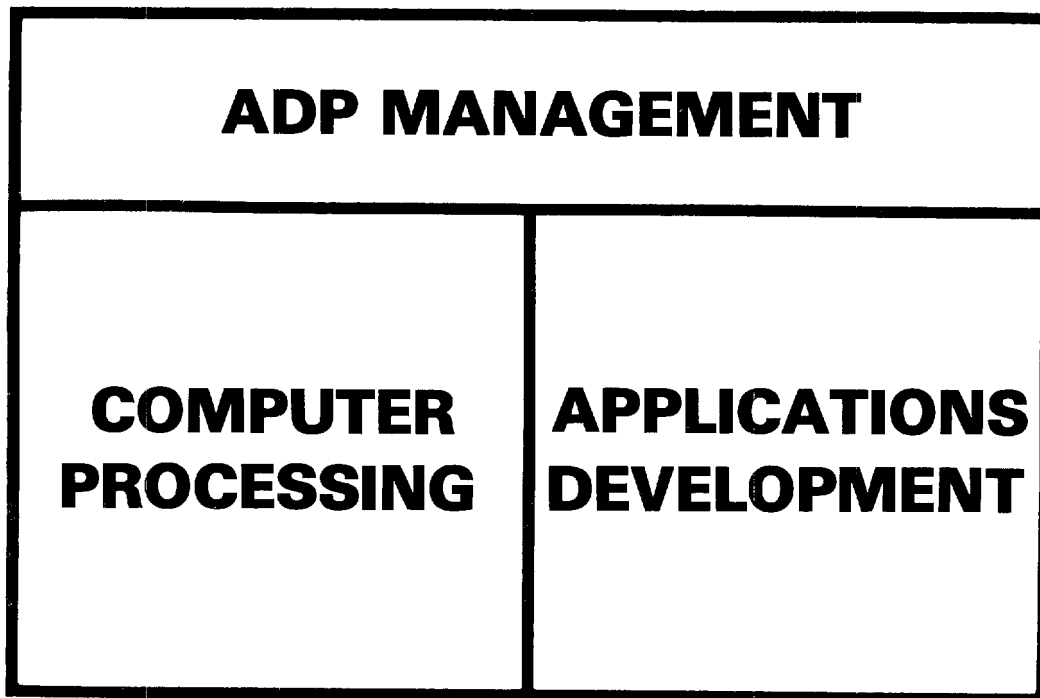|	
	ADP officer or as a technician on a rotational assignment. Evaluation panels begin identification of individuals with management potential and some OTE management school courses are scheduled.
Systems Analyst/Programmer GS-14 Mathematician GS-14	Performs as senior technical personnel large project team leader, large system designer, or as beginning management personnel (Deputy Division Chief; Chief, Training Staff). At this point, personnel are more closely monitored for managerial suitability, and have been scheduled for additional management training with OTE.

I.   CONCLUSION/SUMMARY

Career development is a shared responsibility in Applications. Applications management ensures the availability of training and developmental assignments which are conducive to the professional growth of the employee. Management must ensure the availability of cooperative dialogue between supervisor and employee to establish realistic short-term and long-range career goals and to assess progress along the chosen career path. But the ultimate responsibility for career development must reside with the individual. Each of us must finally answer to ourselves for the success or failure we eventually experience in living up to our full measure of potential.